

## **REMARKS/ARGUMENTS**

Reconsideration of this application is requested. Claims 15-31 are in the case.

### **I. SPECIFICATION**

The title has been objected to as not descriptive. In response, the title suggested by the Examiner has been adopted.

### **II. THE OBVIOUSNESS REJECTION**

Claims 15-31 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent 6,048,451 to Huff, Jr. et al. That rejection is respectfully traversed.

As now claimed, the invention provides a process for increasing the boiling point of organic nitrogen species present within a liquid hydrocarbon feed. The process comprises contacting a liquid hydrocarbon feed comprising an alkylating agent and organic nitrogen species, the liquid hydrocarbon feed being one or more petroleum fractions with a boiling range of 10-450°C selected from catalytically cracked naphtha, coker naphtha and visbroken naphtha, with an acidic catalyst at elevated temperature in a first reaction zone to generate a liquid hydrocarbon feed comprising a reduced alkylating agent content and organic nitrogen species of higher boiling point.

Huff does not render the presently claimed process obvious. Huff describes a process in which organic sulphur species in a hydrocarbon mixture are converted to sulphur species of higher boiling point by contact with an acid catalyst. The Huff disclosure does not suggest the process as claimed in claim 15, since the Huff process does not relate to contacting a "liquid hydrocarbon stream comprising...an organic

nitrogen species” with an acidic catalyst, as presently claimed. Huff instead discloses that organic nitrogen compounds that may also be present in the hydrocarbon mixture can cause catalyst deactivation and, hence, are removed **before** contact with the acidic catalyst in order to prevent damage to the catalyst (see, column 10 lines 54-67). This is stated to be achieved by conventional means, such as by using an acid wash or a guard bed positioned in front of the acid catalyst.

Thus, in the present process, the liquid hydrocarbon stream to be contacted with the acidic catalyst comprises “organic nitrogen species”. In contrast, in Huff, organic nitrogen is removed via the acid wash/guard bed treatment before contact with the acidic catalyst.

In light of the above, it is clear that one of ordinary skill in this art would not have been motivated to arrive at the presently claimed invention based on the Huff disclosure, as there would have been no motivation, based on Huff, to contact the acidic catalyst with a liquid hydrocarbon stream comprising organic nitrogen. Absent any such motivation, it is clear that a *prima facie* case of obviousness has not been generated in this case. Reconsideration and withdrawal of the outstanding obviousness rejection are accordingly respectfully requested.

### III. CLAIM AMENDMENTS

The claims have been amended to improve their form. No new matter is entered.

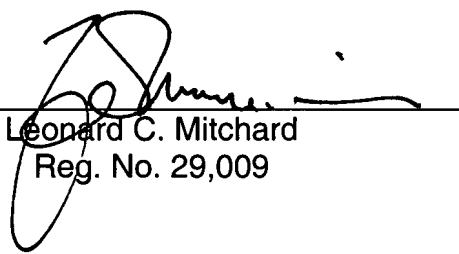
BURNETT et al  
Appl. No. 10/509,832  
April 12, 2007

Favorable action is awaited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

  
Leonard C. Mitchard  
Reg. No. 29,009

LCM:lff  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100